UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
TOLENTINO, RODERICK

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07/15/2009</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-24</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>26 February 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some *   c)☐ None of:
         1.☐ Certified copies of the priority documents have been received.
         2.☐ Certified copies of the priority documents have been received in Application No. _____.
         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 24 are pending.

Response to Arguments

2.   Applicant's arguments with respect to claims 1 and 24 have been considered but

are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 1 – 24, are rejected under 35 U.S.C. 101 based on Supreme Court

precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be

tied to a particular machine or (2) transform underlying subject matter (such as an

article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385

CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S.

584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v.

Deener, 94 U.S. 780,787-88 (1876).

4.   An example of a method claim that would <u>not</u> qualify as a statutory process

would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory

process, the claim should positively recite the particular machine to which it is tied, for

example by identifying the apparatus that accomplishes the method steps, or positively

recite the subject matter that is being transformed, for example by identifying the

material that is being changed to a different state.

5.   As per claims 1 and 24, applicant's method steps are not tied to a particular

machine and do not perform a transformation. Thus, the claims are non-statutory.

6.   The mere recitation of the machine in the preamble with an absence of a

machine in the body of the claim fails to make the claim statutory under 35 USC 101.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wenocur et al. U.S. PG-Publication No. (2002/0196935) in view of Sunder et al. U.S.

PG-Publication No. (2003/0188160).

9.   As per claims 1 and 24, Wenocur teaches deriving, at a network element, a value

of a first cryptosync for the communication session (Wenocur, Paragraph 0621, new

secret keys derived from older keys, keys similar to cryptosyncs since they are used to

encrypt data), the first cryptosync having a life limited to the communication session

(Wenocur, Paragraph 0621, session keys are temporary), but fails to teach based on a

value of a second cryptosync, the second cryptosync having a life extending over

multiple communication session. However, in an analogous art Sunder teaches based on a value of a second cryptosync, the second cryptosync having a life extending over multiple communication session (Sunder, Paragraph 0194, Cryptosyncs are used to encrypt data, thus it would be obvious to see the similarities with encryption keys that overlap periods).

At the time the invention was made it would have been obvious, to a person of ordinary skill in the art to use Sunder's system to securely update files via a network with Wenocur's common security protocol structure and mechanism system because it offers the advantage of securely updating files via a network (Sunder, Paragraph 0002).

10.   Claims 2 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenocur et al. U.S. PG-Publication No. (2002/0196935) in view of Sunder et al. U.S. PG-Publication No. (2003/0188160) in further view of Rezaiifar et al. U.S. Patent No. (6,980,658).

11.   As per claim 2, Wenocur in combination with Sunder fails to teach the second cryptosync is used for message encryption by at least one of the two devices. However, in an analogous art Rezaiifar teaches the second cryptosync is used for message encryption by at least one of the two devices (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to use Rezaiifar's method and apparatus for encrypting transmissions in a communication system with Wenocur's common security protocol

structure and mechanism system because it offers the advantage of maintaining

encryption protocols to prevent the disclosure of communications between parties

(Rezaiifar, Col. 1 Lines 66 – 67 and Col. 2 Lines 1 – 2).

12.   As per claim 3, Wenocur as modified teaches the second cryptosync is used for

verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39

– 48, verification).

13.   As per claim 4, Wenocur as modified teaches the second cryptosync is used for

verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39

– 48, verification).

14.   As per claim 5, Wenocur as modified teaches the second cryptosync changes

between communication sessions (Rezaiifar, Col. 6 Lines 41 – 44, different

cryptosyncs).

15.   As per claim 6, Wenocur as modified teaches deriving step derives the first

cryptosync as at least a portion of the second cryptosync (Rezaiifar, Col. 2 Lines 25 –

38, creates two cryptosync values).

16.   As per claim 7, Wenocur as modified teaches the deriving step derives the first

cryptosync as at least a portion of the second cryptosync and a fixed bit sequence

(Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

17.   As per claim 8, Wenocur as modified teaches the deriving step derives most

significant bits of the first cryptosync as the portion of the second cryptosync and

derives least significant bits of the first cryptosync as the fixed bit sequence (Rezaiifar,

Col. 4 Lines 46 – 62, bit sequence).

18.   As per claim 9, Wenocur as modified teaches the fixed bit sequence is a string of

0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

19.   As per claim 10, Wenocur as modified teaches the deriving step derives a 32

most significant bits of the first cryptosync as the second cryptosync and derives a 32

least significant bits of the first cryptosync as a string of 0s (Rezaiifar, Col. 9 Lines 11 –

22, EID value of Zero).

20.   As per claim 11, Wenocur n as modified teaches the deriving step derives a

portion of the first cryptosync as the second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38,

creates two cryptosync values).

21.   As per claim 12, Wenocur as modified teaches the deriving step derives a first

portion of the first cryptosync as the second cryptosync and derives a second portion of

the first cryptosync as a fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit

sequence).

22.   As per claim 13, Wenocur as modified teaches the fixed bit sequence is a string

of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

23.   As per claim 14, Wenocur as modified teaches the deriving step comprises:

performing a pseudo-random function on the second cryptosync; and generating the

first cryptosync from output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15 –

21, randomly chosen).

24.   As per claim 15, Wenocur as modified teaches the generating step generates the

first cryptosync as the output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15

– 21, randomly chosen).

25.   As per claim 16, Wenocur as modified teaches the deriving step is performed at a base station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

26.   As per claim 17, Wenocur as modified teaches the deriving step is performed at a mobile station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

27.   As per claim 18, Wenocur as modified teaches encrypting a frame of information to send from the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 2 Lines 19 – 23, encryption).

28.   As per claim 19, Wenocur as modified teaches the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).

29.   As per claim 20, Wenocur as modified teaches incrementing the first cryptosync after the encrypting step (Rezaiifar, Col. 2 Lines 38 - 48, incrementing).

30.   As per claim 21, Wenocur as modified teaches decrypting a frame of information received at the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 5 Lines 56 – 67, decryption).

31.   As per claim 22, Wenocur as modified teaches the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).

32.   As per claim 23, Wenocur as modified teaches incrementing the first cryptosync after the decrypting step (Rezaiifar, Col. 2 Lines 38 – 48, incrementing).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on Monday - Friday 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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